AR 201-12549 b29

ROBUST SUMMARY
ALKYL SULFIDE CATETGORY
CAS # 67124-09-8
GENETIC TOXICITY ELEMENTS: GENETIC TOXICITY IN VITRO

Test Substance	
CAS #	CAS# 67124-09-8
Chemical Name	2-propanol, 1-(tert-dodecylthio)-
Remarks	100% purity This chemical is also referred to as propanol/dodecylthio derivative in the HERTG's Test Plan for Alkyl Sulfide Category. For more information on the chemical, see Section 2.0 "Chemical Description of Alkyl Sulfide Category" in HERTG's Test Plan for Alkyl Sulfide Category.
Method	
Method/Guideline followed	Consistent with guidelines outlined in OECD 471 and 472
Test Type	Reverse mutation assay
System of testing	Bacterial
GLP (Y/N)	Y
Year (Study Performed)	1988
Species/Strain	Salmonella typhimurium TA98, TA100, TA1535, TA1537 Escherichia coli WP-2
Metabolic activation	With and without
Concentrations	0 , 15, 50, 150, 500, 1500 and 5000 microgram/plate (DMSO vehicle)
Statistical methods	Revertant colonies were scored using an electronic colony counter. The mean number of revertants/plate and the standard deviation was calculated for each concentration and strain. A significant effect was considered to be a two-fold increase in revertants when the background was 50 revertant/plate or greater; a three-fold increase when the background was between 10 and 49 revertants/plate; and a four-fold increase when the background was less than 10 revertants/plate.
Remarks field for test conditions	No significant deviations from guideline protocols
Results	
Remarks	The test material was tested without metabolic activation at 5000, 1500, 500, 150, 50 and 15 microgram/plate and found to be non-mutagenic to the bacterial strains tested. The test material was toxic to TA1537 at 5000, 1500, 500 and 150 microgram/plate. In the confirming assay, the test material was tested at the identical concentrations, and again, no mutagenic response was observed with any of the bacterial strains. The positive controls, sodium azide, 2-nitrofluorene, 9-aminoacridine, and ENNG at concentrations ranging from 1.0-80 microgram/plate, produced statistically significant positive responses in the bacterial strains used in this study. The test material was also tested in the presence of an S9 microsomal fraction from Aroclor 1254-treated rat livers. The concentrations tested (5000, 1500, 500, 150, 50 and 15 microgram/plate) in the activated system did not induce detectable mutagenic events with the bacterial strains used. The negative responses were reproduced in a second confirmatory assay.

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	Incidentally, the S9 mix reduced the toxicity of the test material in the presence of TA1537. The positive metabolic activated control, 2-anthramine at concentrations ranging from 0.5-20 microgram/plate, produced statistically significant positive mutagenic responses in the bacterial strains used in this study.
Conclusions	The test material was assayed for its ability to induce mutations in Salmonella typhimurium and Escherichia coli in the presence and absence of a metabolic activation system. At the concentrations tested and under the conditions of the assay, the test material was considered to be non-mutagenic.
Data Quality	Reliable without restriction (Klimisch Code)
References	This robust summary was prepared from an unpublished study by an individual member company of the HERTG (the underlying study contains confidential business information).
Other	Updated: 12-27-99